# Vermont Enrmer ROYAL CUMMINGS.

ST. JOHNSBURY, VT. C. HORACE HUBBARD, Agricultural Ed'r,

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Communications for the Agricultural Department should

Prof. Atwater concludes as the result of experiments by Dr. Wagner and Dr. Wolff, that, taking into consideration the amount of the yield, the percentage of albuminoids, fat oils and other carbo-hydrates contained, and the comparative digestibility at different stages of growth, clover is most valua- able occupation. ble just before it is fully in bloom.

fat cattle to be admitted irrespective of breed.

It is reported that the Marquis of Lorne and his princess will visit this country. The Chicago Times promises him a cordial reception and entire immunity from the social vexation of being separated from his wife in company by court rules, and advises him to get a little money from his wife's relations, if he has not enough of his own, and "go west, young man," and buy a farm.

By an act of the New York legislature at the recent session the hitching of horses or other animals to, or leaving them near enough to injure, any fruit or forest tree which has been transplanted or used as a shade or ornamental tree around any schoolhouse, church, or other public building, is punishable by a fine of one to ten dollars, with costs, one-half of the penalty to go to the overseers of the poor, the other half to the complainant. This is a go we hope it will be enforced.

The editor of the New England Farmer says he fed many bushels of apples to his cows and young cattle the past season. In case of choking, the animal is turned loose in the yard and if relief is not obtained at once by moving around, he uses a spoonful of soft soap to a quart of warm water, and pours a little down her throat, followed by gentle hand rubbing on the outside of the neck near the seat of the trouble. Some times two or three doses were required, usually one was sufficient.

The well written communication from Mrs. Rice, "concerning weeds," will remind the readers of the FARMER that it will never do to forget the weeds in the hurry of haying. The cultivator should be run through occasionally, if nothing more. It costs more than people suppose to raise a crop of weeds. Though it is impossible to exterminate the seeds of weeds from the soil as it is wickedness from the heart of man, they may be kept down, to a certain extent. We hope Mrs. Rice will remember the FARMER occa-

There has been a constant cackling over large eggs among our exchanges, this spring It is difficult to see why the size or weight is of any great consequence, when little Bantam eggs will sell for as much a dozen as Brahmas' of three times the weight. But when the staid and dignified pullet of the Bellows Falls Times raises her quills and discloses, "on the editor's table," a little "seven by nine" hen fruit, and struts off clucking, it is time to say this is boys play. We did not intend to mention the circumstance, but just to show brother Swain what a mature fowl can do, an egg was laid on our table which measured six by twelve inches, and weighed eleven ounces.

At this writing, July 7th, the grass crop have plowed up and manured since owning spoiled by showers. the farm there is a heavy crop.

Farmers who have waited for it to grow this year have been wise. The probability is that the crop will mature rapidly, and the danger is that the haying will all come in a heap, and so much of the grass will get overripe. All we can say is "push things."

We have received from H. Evans, Spring Station, Woodford county, Ky., the circular of the 5th volume of A. J. Alexander's "American Short-Horn Record."

The plan upon which the Record is com piled requires every ancestor or cross to be entered, not only making it complete in itself, but putting the information in the most compast and convenient form.

No female is allowed to go in except she has proved a breeder. Every animal must trace on the side of both sire and dam to imported animals. The charge for each an- Grain or roots are not measured, but sim-

Females will be reëntered with produce for fattening are weighed; when fat or ready for market, they are weighed again. Guesstrotypes of stock entered will be bound or work is abolished, and certainty, with its cost of printing and binding. No money need be sent with pedigrees.

be sent post-paid on receipt of \$18,30.

Hon, F. D. Douglass, of Whiting, writes to the New England Farmer that the average yield of cows in Vermont does not exceed 150 lbs., and that it may be raised to 250 lbs., and in some favorable cases 300 lbs. By culling the stock; improved hygienic condition; supplying succulent food in dry seasons ; avoiding irritating causes to cows; providing pure and convenient water; adopting a system which saves labor and increases the product; improving the color, tion of live stock in Soptember and October. texture and general appearance, and making the packages more attractive, and the horned cattle Sept. 20 to Oct. 5; sheep, quality uniform, we build up a reputation and demand (and price), and receive an be provided at cost, and to take all the care ample pecuniary reward, and elevate the of animals and stalls. calling from one of tiresome, filthy, profitless drudgery to a pleasant, healthful and profit-

sume" that 700 head of cattle will cover all M. Ames, now of Loomis' Ranch, Cimarron, tainly is not coming up to the true idea of desirable entries, and apportion the stalls New Mexico, where he is engaged in wool upon that basis-270 to Short Horns, 140 growing on a large scale. He has in ranch Let us as breeders stand or fall an our own to Channel Islands, 70 to Devons, 70 now some ten thousand sheep, including merits. For our own part we have no fears, Holsteius, 70 to Ayrshires, and 70 2700 lambs, and an interest in others let for we have faith in the merits of home-bred to other pure breeds. Draft and out, to make up about 20,000 sheep. His stock. If we depart from this standard the description of the people, climate, soil and terest, and the celat of success will be a quessystem of handling sheep in that El Dorado tionable honor. The exhibition under other Mexican sheep yields a fleece of about one outlay in the expense of importation rather and a half pounds of something called weel, but which will not take dye more than so be glad to see a rule adopted by the Bureau is ameliorated, if that word may be used, so sively to the exhibition of American bred that the wool sells in the dirt for 29 to 35 stock. Wherever there have been established any breeds or families of stock in this cents, the sheep yielding about one and a country we trust that their admirers will rehalf pounds twice a year. One man takes spond in full strength. Let Kentucky marcare of two thousand sheep through the day, and another in the night. The mercury fell to 12 o below at the ranch last winter, and many sheep perished with cold. The Mex- out stint, and the West the "Poland-Chias servants and treacherous beyond the con- part. We want to see American Berkshires, ception of Yankees. Still they make better herders than the latter, and are employed Ayrshires and all other breeds honored with almost exclusively.

Wool growing is considered very profitable there. We wish Mr. Ames may make his fortune and return at no distant day to enjoy it with his family in Vermont.

We have from Hon. T. S. Gold, West Cornwall, Conn., the eighth annual report of the Connecticut state board of agriculture. At the winter meeting of the board is December, 1874, the subject specially assigned for consideration was "Milk." The meeting was opened by a very valuable paper by Secretary Gold, on "Milk." Dr. E. Lewis Sturtevant, of South Framingham, Mass., read a very elaborate paper entitled Physiological Considerations Concerning Feeding for Butter and Cheese."

Prof. W. O. Atwater read a paper on the Results of late European Experiments on the Feeding of Cattle," in which the subject is treated in a very thorough and exhaustive

Hon, X. A. Willard, of Little Falls, N Y., read a very interesting paper on the Philosophy of Dairy Manufactures."

Mr. Olcott read a report of the commit ou "Experiment Stations." Hon. F. D. Douglass, of Whiting, Vt.

read a paper of practical value on the "Philsophy of Butter Making." Mr. P. M. Augur read a paper on the

'Orchards of Connecticut."

These papers, all of which were very able, and the full report of discussions which were very spirited and intelligent, together with the reports of committees and communicaions and statistics, and the reports of the committee on farms, and of Dr. Cressy, Veterinary Pathologist, make up one of the most interesting and valuable agricultural volumes ever offered to the public.

The farmers of Connecticut ought and doubtless are, proud of the work done by their board for the cause of agriculture in Connecticut and the whole country.

## Opening Hay.

It is a common custom among farmers to is most promising. This is true so far as wait until the dew is dried off in the meroour observation extends, and recent reports ing before opening the hay cooks. We never of the same condition of the mowings reach | do, but throw them open as soon as we can us from all quarters. The drouth through get to it. If any farmer doubts that the hay the fall and winter was severe on the sod, will be dry earlier opened at six o'clock but the cool, moist weather through the while the ground is wet with dew than at spring and early summer have made amends. eight or nine, let him try it; open one row The grass is late, but where there was a six o'clock, and when he goes out a couple of good sod last fall, and a good soil under it, hours later to open the rest, let that row be the growth is heavy. The "old mowings" turned over, and write to the FARMER whether are light. We have one, we regret to say, he gained or lost by the operation. Two and there is not much there. But where we hours often saves tons of hay from being

## Scales on the Farm.

We have had a hay scale of the Howe pattern capable of weighing anything from a pound of butter to three tens of hay, and sufficiently accurate for weighing wool whether it be 40 cents or a dollar a pound, on our farm for three years and can indorse the following from the pen of Dr. Hoskins in the Vt. Watchman :

It is rather astonishing that the value and profit of a platform scale in the barn, is so little appreciated by farmers in general. A good many new barns will probably be erected by readers of this paper in the course of the year; how many of them will be likely to include the scales in their plan, or in their estimate of cost? Yet those few who possess them, would hardly know how to do without them. When one has such a scale, everything for market or for sale is weighed. of game unlawfully killed.

imal is \$1, live ancestors twenty-five cents. | ply weighed, saving time and securing great- inter-dependent, police regulations are framed printed at \$5 cach. Those who have enter- attendant satisfaction and profit, takes its ed stock will receive the volume at the actual place. The feed for stock of all kinds can be weighed out, and accuracy, uniformity of every crop is easily got at, when scales The four volumes already published will like these are at hand; and many times the information thus obtained will surprise and perhaps influence the whole course of succeeding years' work. Experiments in feeding stock are easily carried out with their help, and knowledge gained that will I. Game is more plentiful than with us in lead to a saving of many times the cost of

## about a farm, depend upon it, than a plat-form scale in the barn-floor. Live Stock at the Centennial.

One of the most attractive features of the Centennial next year will be the exhibi-Horses, mules and asses Sept. 1 to 15; swine and goats Oct. 10 to 25. Exhibitors among consumers, increase the consumption are, of course, to pay for forage which will

At a recent meeting of the American Institute Farmers' Club, Frank D. Curtis said, "I beg leave to suggest at this early day that the exhibition of live stock be confined We had the pleasure, July 7th, of a call entirely to American-born animals. Let it from our old neighbor and friend, Mr Henry be native American in all respects. It cernational pride and appreciation for an American citizen to exhibit a foreign bred animal. of wool growing is very interesting. The circumstances may be simply a question of than an evidence of skill, and enterprise and much brass wire. By crossing with mercuos of Agriculture of the International Exhibior Cotswolds the former preferred, the staple | tion that Americans should be limited excluborn; let Vermont gather from her moun tain sides the productive merinos; let Penn-sylvania bring her Chester-white pigs withicans are absolutely obsequious and servile nas;" the Victorias will be there to do their Suffolks, Essexes and Yorkshires; American Jerseys from New England, and Devons and birth upon our soil."

## Game Laws in Europe.

The subject of the protection of fish game has been brought to the attention of the people of Vermont, for several years. Legislative enactment has gone far to protect fish and game, even to the protection of wild geese flying over," and partridges while they are destroying the fruit buds in orchards in spring, but has ignored entirely the rights of owners of land and water, until the act of the last session protecting those who engage in fish culture. We regard this as a serious defect in our law.

The following from Dr. Goldsmith to the Springfield Republican is of interest as bear-

ng on the subject : Carleban, Bohemia, May 30, 1875. I want to tell your readers something about European game, game laws and game preservation. In Great Britain, France, Belgium, Germany and Austria the idea which underlies all legislation is that hunting is a use of land adherent to the soil, and goes with it-that the right to kill game or given tract of land is as much an use of it as is the growing of timber or of grain, or the rearing of cattle. Thus the sentiment of the people holds that it is as much an invasion of the proprietor's rights to kill the game as to kill the poultry. The trespass in the case of poultry is one against a right and a property. In the matter of game, the respass is not so much upon the property in game, as upon that use of the land gives to the owner a qualified or conditional property in the game, and an uncondition (save as modified by police regulations) and exclusive right to kill it on his premises. The hunting use of the land is inseparable and in practice often separate; or, in other words, A, the land-owner, can let to farmer, the agricultural uses of the land, and to C, a sportsman, the hunting or shooting. Most of our best lawyers in America will think, agree that the "common law" gives just these rights to all American landwners. The difficulty with us however, is that our state statutes provide no laws adequate to the protection of these rights. Our this and other weeds which will forever set laws of trespass regard only the wrongful at defiance all the efforts of man to rid the occupancy of land, not the wrongful occupancy of a franchise. According to our of trespass, the sneak who tramples down your grass while hunting rabbits with bag and ferrets is no more of a trespasser than he who, on the way from church, walks through the fields chanting the 199th psalm. The trespasser is punished for the damage he does to the grass or grain or plowed land, etc., but not for usurping a franchise. Police regulations may provide a punishment for catching the rabbits with the help of ferrets or out of season, but not for catching rabbits

on another man's land. In almost all Europe the law punishes not only for wrongful occupancy and for the damage done during that occupancy, for catching the rabbits by forbidden means and at a forbidden time, but punishes also for the trespass upon the franchise -the hunting -the shooting use of the land. Herein seen the marrow of game laws. The details right in his view of the matter. of the law for the protection of the franchise differ in different countries. The scheme of each country's statutes embraces mostly the same purposes. In the first place the trespamer upon occupancy is dealt with according to his intent. That is to say, the offunse is the greater if, in addition to being wrongfully on the premises, he has in his possession the implements of a poncher. the second place, the trespass is more serious if in the night, or if he carries arms with which he may resist arrest, or if the trespasser goes in company with others. The two latter provisions are for the protection

game is so regulated as to prevent the sale

of the persons who guard the game, i. e.,

the owner of his keepers. For the purpos of efficiency of execution of the law, game

cors of the peace. Then again the traffic in

keepers or their equivalents are ad hoc

of landed property, the law regulates the time for killing each kind of game, both of the varieties which are permanently doniciled and those which are migratory, as well and consequent economy, secured. The yield as the means of capture. In addition to this, almost everywhere a license is required | follows :before a franchise can be exercised. In some countries, the possession of fire-arms is prohibited, unless a license has been ob-

> equally populated districts. 2, It is cheap-er in the same conditions. 3, The land has added to it, as compared with that in America, a very considerable value; the rental being in many cases more than the killed game would sell for. 4, For all this, the average gunner kills his game at less actual cost, all things considered, than in America.

### The Hay Tedder.

The New England Homestead copies our remarks on the hay tedder, crediting to the Boston Cultivator, a mistake, we doubt not,

A hay tedder is almost a necessity on a well ordered farm. It saves a great deal of get along a great deal faster with his having than he could without one, and also secure his hay in better order. Rapid drying gives a better quality of hay than can be obtained when the grass is exposed to the sun for three or four days. By the use of a good tedder even heavy grass can be cured in two days and a lighter crop in one. Frequent stirring promotes rapid drying and a tedder stirs the grass better than the work is usually done by hand. By the use of this machine the grass can be turned three or four times a day cessary, and often in partially cloudy weather hay which under the old system of handling would not have been half dried will tedder same years and should not think we less important for the boy designing to be a could make hay without one. We believe it farmer to learn his trade, than, if he intend s cheaper and easier to use labor saving to be a glass-maker, machinist, or an artisau machines than it is to hire help. It is true that machines cost considerable at first, but if well cared for they will last a long while, do a great deal of work, and do it well.

#### For the VERNONT PARNER, Concerning Weeds.

BY MES. MARIA P. RICE. There has been much discussion the last

two or three years as to what is the "wickedest weed" in the world. Warner, as everybody knows, commenced it in his entertaining book, "A Summer in My Garden," in which "parsley" plays a prominent part-a weed for which the author has such a horror that he cannot even write the word in full. Next, a contributor to the Christian Union contends that "chickweed" is worse still, a ooking plant, till we remember that the out for ourselves that when we think we have pulled it up by the roots, we have taken little but the tops. Then a lady comes out in the same paper and declares that "milk- a total rain-fall over the forest of 192,5 milweed" is worse than either. She gives a very interesting account of her trials with that nuisance in a certain field of hers, and tells how, after all attempts to eradicate it failed, she pulled every one up with her own hands. I have waited anxiously to learn the result of her experiment, having had some experience with weeds in general, and having little faith in any efforts to exterminate this one, or any other; but "further, that depenent saith not," to my knowledge. Now, I know the habits of all those vile things, and not even the pen of a Warner can exaggerate the amount of annoyance and trouble they subject us to; but the "wickedest" yet, in my opinion, is "plantain." This is my special grievance, and, judging from the past, is likely to remain so. I have a yard from which it is my ambition to banish everything but the greenest grass, and with one exception, I have succeeded, but I am baffled continually by this persistent "plantain." For many years it has been a handto-hand fight. With a perseverance that in a great cause would have won a name and fame in the world, I have hunted that weed ; and those of my readers who have ever attempted to pull up plantain in the spring and early summer can appreciate the labor. Not a seed is permitted to ripen, yet with the first grass that audacious plantain is sure to make its appearance, forcing its way to the very doorsteps. Where do the seeds come from? I think there must be an inexhaustible supply in the soil of the seeds of

earth of these pests, I knew a gentleman in a New England rillage who was the personification of neatness, perseverance and thoroughness. He had a garden from which every weed was removed each day (Sundays excepted) and no garden or cultivated ground was near, from which seeds would be likely to be blown. That garden was cultivated for more than a quarter of a century with the same untiring vigilance and scrupulous care, but did the weeds cease to appear? By no

The author of " Ten Acres Enough " be lieved in the extermination of weeds, but I am inclined to think that the Dutchman who worked and argued with him was nearer

Though some modern scientists distrust the stories told of the germination of seeds taken from mummy cases and other ancient receptacles, yet many seeds must be indistructible, except by fire. We read of earth taken from fabulous depths, yielding strange growths of plan ts before unknown in the region. Who will venture to say how many ages these seeds had laid in the ground?

Geologists tell us that the seeds brought from far northern countries by the drift of a former geologie age, still retain their vitality, and under favorable circumstances, may minds, then, to accept the situation and go

#### Culture and Training for Farmers.

The Boston Cultivator gives an account of a visit to an extensive manufactory of glass, with a description of the intricate and

Having thus barely sketched what we saw them-beginning with the Berkshire county from the first step to the last is made under

the crude material to the perfect wares, Would that the same were true of farmunfit to work in a glass factory or anywhere else where skilled labor is required, as a dernier resort he turns farmer, and soon your ears will hear the complaint that "farming of any other kind. Farming is an art, and must be learned to make it pay, which is no less true of this than of every other kind of siness. We hear a great deal about ser- ples was dropped in one after another, noting entific farming; but we are, nevertheless, inclined to look upon practical farming as an art rather than a science.

#### Forests and Rain.

The much-discussed question of the influence of forests upon rain-fall has lately been made the subject of very interesting observations by Fautrat and Sartiaux in France. Instruments for determining the amount of rain-fall, degree of saturation of air (by moisture), evaporation, and temperature, meters (181) above the tops of trees-oak the surface of an adjoining portion of cleared and cultivated land, and at a distance of 300 seeds are well nigh indestructible, and find meters (984 feet) from the edge of the forest, similar instruments were placed, and simul-taneous daily observations made. The first report of these, from February to July, 1874. inclusive, showed, for the period of six months, limeters (71 inches), while that over the open ground was only 177 millimeters. The aver age for each of the six months was larger over the forest than the cleared land. The same was true of the degree of saturation of the atmosphere, the monthly average in the one case being sixty-three per cent. and in the other 61.7 per cent. The authors con-clude that, if the daily observations in the future accord with those already made, it may be regarded as demonstrated that forests rm vast apparatus for condensation of moisture, and that there is more rain upor them than upon open land.

[Harpers for July. This is a very important question and we are glad to see efforts made to solve the probslightly incredulous as to a greater amount of rain falling over the forest than at 984

#### A Good Exhibit for a Flock of Sheep. Thomas W. Praddex, writes from Hanover

N. H., to the New England Farmer

In looking over my last year's (1874) account with my sheep, I find I have received from my flock of sixty-five merino sheep, as

had the same sixty-five sheep and three of my best ewe lambs left. My flock consisted of thirteen ewe lambs, fourteen one-year-old ewes, and thirty-eight breeding and barren ewes. I think my flock was worth more in the fall than a year ago, enough to pay for shearing, &c. Now, allowing twenty of hay to keep one hundred sheep, sixty-five sheep will eat thirteen tons. Allowing fifty cents per head for pasturing sixty-five sheep, \$225,50 for thirteen tons of hay. \$225.50 by 13 -\$17.34 per ton for hay fe to my sheep. I also feed some carrots and grain to my sheep, and think it takes less hay and is as cheap as hay at \$17.31 per

## Travelling Agriculturists.

The Commission del' Enseignment Agra tote, in France, in its last report, reco sends the appointment of professors to travel to and fro through the departments of the ountry, visiting the villages and farms, to sunsel the cultivators of the land upon the best systems of agriculture, live stock breeding, etc. The Commission thinks that such travelling professors would do much more good than the stationary ones in large towns and cities. I think so, too, provided proper professors were chosen, for an improper would do much more harm than good. the annual meetings of the state agricultural societies will soon take place all over our own country, I respectfully suggest their carnest pasideration of the subject of travelling ofessors or secretaries, as they may plea call them. The French Co siders agriculture the most important branch of human activity, and that it should occupy

the first place with every people.

[Cor. of N. Y. Tribune. [The system recommended above is similar to that adopted by the Vermont Board germinate. We may as well make up our of Agriculture, in going about the state holding local meetings among, and in contact

## Differences in Quality of Milk.

NEW METHOD OF ESTIMATING THE VALUE OF MILK FOR CHEESE MAKING.

In the spring of 1856, I made a different interesting details of manufacture, and of the | of 20 per cent in the value of the milk of skill and fine workmanship exhibited. Then gle week's time, by a change in the quality of feed, and thought I had been doing pretty well by my cows all the time, because I gave on an afternoon's visit to the New England but the hay had been wet in curing, and was glass works, we were impressed while in two years old. By feeding with green bay, glass were severally in the crude state, as which had before made 100 pounds of cheese, we listened to the process of compounding now made 120. In the summer and fall of sand, as a basis with the fact that the tests of the value of the milk of the different manufacturer must know how to mix these la order to produce good glass. So with a of these tests speak for itself. I took a per man on a Berksbire county farm for his hasis-thought we he must know how to com- top of the graduated scale, and a two-ounce pound his materials in order to produce a graduated measuring glass, and a lot of good erop of corn, wheat, oats, barley, potates, grass, etc.; and it is the want of this knowledge on the farm which the glass maker possesses of his art, that makes all the difference in the results as seen in the sample room, whether of the glass works or turned the milk of each into separate tin the farm. At the glass works, the sample basins, which I set in a vat of water warmroom presents to the view of the purchaser ed to 94 degrees, where they floated till the or visitor, all the different kinds of goods milk was all in. The samples were then all produced by the New England Glass Co.; so of the same temperature. The little gradof the granary and barn of the farmer, unted glass was then brought into use, and slow and disagreeable work, enables a man to whether here or there, the visitor sees the an exect quantity of rennet was applied to samples of his farm, such as his skill has each. It occasioned a little disappointment produced—ordinarily, we regret to say, to see that they did not all coagulate exactly greatly inferior in skill to those seen at the glass factory. The glass maker's journey cause of that here. After they had all become perfectly curdled, the curd was brothe guidance of practical intelligence-from | ken and carefully stirred, and raised to 98 degrees by turning steam into the water in which the basins floated. When the whey ers! But alas! alas! when a man is found | bad all been separated and turned off, and turned on, and the water raised to a boiling heat, and the basins kept floating on it til the curd was thoroughly dried. This dried don't pay!" Is this at all strange? As curd was taken as the standard of value for nothing else paid, why should it now be deemdo to go into the barn. We have used a ed strange that farming don't pay? It is no exact, it required that each sample should be Not having anything at hand with which to weigh with sufficient exactness, the relative values were determined by measure in the following way: The percent glass was filled up to 30 degrees with water, and then the dried curd of the sam-

> dried samples of eleven patrons raised the water as follows: Two, 64; one 64; two 7; four, 71; two, 81 degrees.
>
> Taking the extremes, the best gave 25.92
> per cent more of dried ourd than the poorest, yet they shared alike in the disribution of the proceeds. Adding to these dried specimens the usual amount of water (30 per cent) contained in cured cheese, were placed at an elevation of about six and it would require 9.32 pounds of the best milk to make one of cured cheese, and 11 .extremes was made by feeding. The cows corn; the others short pasture only. It was of his neighbor's sowed corn; but such instances are common. It is very easy to make the division according to the actual quality of milk, and when the difference is

every time just how many degrees each sample raised the water. This was a very

convenient way of estimating, and was suffi-

start an equal mode of dividing [L. B. Arnold, in N. E. Dairyman.

### English Turnips. The flat English turnip (of which there

are two varieties, the white top and the red

top, which differ but little except in color) nay be sown in this climate any time bethe middle of July, with the expectation of getting a good erop on suitable land. Sown later, the roots will be smaller, but as severely as the early ones, a fair bulk of the naller turnips may be harvested. harrow the land thoroughly, if after some early crop, such as early peas or potatoes; and then, having carefully and evenly mixed a pound of good seed with half a of fine, moist sawdust, sow it broadcast, as equally as possible, on an acre of land. feet from it. It is on the face of it improb- To get a full crop this equal sowing is essenable, as the old farmer said, when informed tial, and those who are not very skilful can that the earth turned over once in twenty- do best by using more seed, and sowing half of it going one way of the land, and the rest going cross-ways. The sawdust not only gives more bulk to sow, but also enayou to see where the seed falls, As soon as the young plants have got four or five rough leaves (leaves that grow out after the seed-leaves), they should be carefully thinned. The early sowings need thinning, so as to leave one turnip to a square foot If this rule is followed, it will look, after you have done thinning, as if you had dug them all up, and very few will carry the thinning so far. But if the land is good, plants a foot apart each way are near enough, and will make a larger and much easier harvested crop than if left nearer together. Later sowings may be left six or eight inches

owing, the seeds should be brushed in, and on light soils rolled. The weeds should all be removed at thinning, and the plants will then soon shade the ground so as to smother out whatever may grow afterwards. These urnips are quickly harvested by two hands, ne going ahead with a hoe ground sharp. and striking off the tops, while the other rakes the turnips out with a prong hoe. One barrel of a good superphosphate to the always pay on this crop, and, on land in good heart, is all the manure required. A fair crop can be got among corn, by scattering the seed between the rows at the last hoving Don't use too much seed for this purpose, as ninning turnips among corn is difficult work.

#### [Dr. Hoskins in Vermont Watchman. Profit of Feeding Good and Poor Cows.

If common cows are to be kept, it would ertainly be better to give full than scanty spond readily to full feeding upon milk-producing food, and develop the milk secretion with great rapidity; but as a general rule, those cows pay best for extra food that have aiready developed the habit of turning all extra food into milk. The cow that has always been kept scantily, will usually apply most of the extra food given to laying on fiesh instead of secreting milk. Such a cow should be fattened and seat to the butcher. We would not advise dairymen to feed poor cows for the purpose of developing them, for costs too much; but if such cows are to be kept, for several years, then it will pay better to feed full rations, and some of them will greatly improve as milkers, while the others may be sold to the butcher, and their places supplied with better ones. The darrymen should seek, if possible, for on fighting the weeds, as we do the other with, the farmers. It is proving a success, cows already accustomed to respond to generous feeding.—Live Stock Journal.

## Farming.

There is m our family of readers a large number of physicians, druggists, clergymen, neeted with the pursuit. They would, like John Randolph, go out of their way a mile to kick a sheep; and as to cows, oxen, and all animals but a horse, they never wish to look upon them. If they live to middle life, eat it as readily and eagerly as any calf they "meet a change," and it their success would new sweet milk.

[W. H. White in N. E. Farmer they may have fallen into, then the wish is heard expressed, that they had remained upon the farm. The tilling of the soil is a glorious calling, and depend upon it, young men, the time is coming when it will be that the sources of loss in the storage is two; more remunerative than most trades and pro-

The fact that agricultural journals and other works on the subject are so widely read is a hopeful sign for the future, and shows that the interest of all classes is intinately connected with the tillage of the soil. [Boston Journal of Chemistry.

### Night Soil.

Alexander Hyde says in the New York

Liebig calculates that the soil and liquid excrements of a man amount on the average to 546 pounds in a year, and that these contain 16.41 pounds of nitrogen, or enough of the this element to fertilize an acre. If this is so, why should a man with a family of five or six persons be inquiring where he can obtain manure to enrich his garden spot? Both health and economy demand that with the daily deposit of the vault there should be also a liberal sprinkling of dry muck or loam, certainly during the warm portion of the year. If left to ferment and decompose, much of the value as a fertilizer is dissipated into thin air, breeding disease. If covered daily with some absorbent—dry loam is about as good as any-the gasses are all saved for the land and the air is not defiled. It will tend greatly to the health of the family, and to system and economy of labor, if the deposit in the vault is made regularly and beech—in the midst of a forest covering 72 of the poorest. The difference in these bonk has received the daily deposit let it be extremes was made by feeding. The cover bank has received the daily deposit let it be A sprinkling of plaster or fine charcoal is often recommended for securing the rich gasses, but we have found dry loam, or even fine coal ashes, to be effectual for this purpose. Thus treated, night-soil is no more offenisve in its manipulation than common stable manure. Whatever absorbent is used put it on liberally. Night soil will bear great reducing. Six or eight parts of loam to one of night soil are better than less, and the manure will be found full as rich as it is

#### safe to use. A New Device for Testing Milk.

The latest device for testing milk to ascertain its impurities and the quantity of water which may have been added to it, is the invention of Alvin Middaugh of Scio, N. Y. It consists of a series of small pans arranged in a water bath or receptacle, so that the contents | pastures which were cut down and eat down the late sowings need not be thinned so of the vats may be heated either by water or steam. As the milk comes to the factory a given weight—say one pound—is taken from tures seem all the better and more vigorous the can and heated in the pan until a temperature of about 90 ° Fahr, is reached. At with, The more one sees of blue grass, the his temperature, Mr. Middaugh says, it is more it grows in one's estimation, but it takes found by practical experiment that any peculiar odor, such as the smell of garlic, aged milk, putridity, fever or disease of the udder, prairie state. will each unmistakably manifest itself by developing the peculiar odor which charac-

teries these impurities. is shown to be unsound, it may be rejected so says; Sheep raising for the supply of our as not to injure the good milk with which it meat markets is unquestionably one of the comes in contact, and at the same time the most profitable branches of husbandry in this causes of the impurities can at once be made state. bad condition, and is suspected of being di- than in any other state. Connecticut has a luted with water, the sample in the pan is coagulated with renact and the curds com- land, and one can count the towns on his pressed so as to expel the whey. By knowng the standard weight of curd to a pound of milk and comparing it with the sample tested, the variation of course shows the amount of water which has been added and notice. The sheep breeder is measurably the percentage may be deducted from such guarded against loss by an efficient law, patron's milk. Again, if the milk of any patron is excessively poor in ourd, by this process of testing the exact percentage to which he is entitled is determined, and thus his share may be equitably adjusted.

The plan seems very simple and is not at all complicated in any of its parts, and we should say it would prove useful in many instances. By this process not only the weight of card but also the weight of the whey, may be determined and a pretty accurate percentage of the value of milk determined.

Thus, with the lactometer and cream gauges, together with Mr. Middaugh's device, dishonest patrons will not readily es-cape detection in their fraudulent practices. Any simple and practical plan for detecting ad milk, or milk that is excessively poor and has been watered on its delivery at the factory, is a desideratum, and we bring Mr. Middaugh's invention to the no

#### [X. A. Willard, in Rural New Yorker. Keeping Apples out of Doors.

The Rural Home gives an account experiment near Rochester in keepapples on the ground under leaves, bushels of leaves were placed on one bushel of apples, the whole being partly surrounded by avergreen trees, which kept the wind from blowing the leaves. They were found this spring less decayed than apples in the cellar, and fresh and fine in condition. There were obviously two or three causes which made them keep well. Contact with the earth gave them moderate and uniform heat from below; the leaves, being stratified, turned off the water and kept out the cold, the frost of very few winters ever reaching through a foot of leaves; and the evergreen trees gave additional protection. If we were covering apples in this way in an exposed situation, we should want a foot of but, surrounded closely by evergreen trees, a single instance where any disease in a half that depth of leaves might answer.

### Feeding Sour Milk.

Reading the remarks concerning feeding erchants, chemists, &c., and we have never | ber of the Fanmen, brought to mind an inheard a word of complaint from any of them stance of a prosperous farmer in Connecticut that we bestowed too much attention upon who is now dead, which may serve to add to agriculture, or that they were not interested in the subject. Agriculture is so fascinating, so noble, so grand in all its relations some half dozen cows, which brought him and bearings, that all classes of readers, if calves annually, some of which were raised, they do not own a rod of land, are fond of while others were fatted for the butcher. agricultural literature. There are but very The calves were allowed to take one or more lew in any of the professions, or in any of meals at the teat, in order to reduce the the industrial pursuits, who do not cherish a cow's udder, and then they were put in a secret hope or expectation that some day pen, or tied out of sight of the cow, and they will own a farm, and till it, and die fed a few days on new milk, tapering off by upon it. As people grow older, they love adding skimmed milk to the new, which was to think of mother earth; they love to look diminished till only skimmed milk was givupon broad acres, covered with the bounts-ous gifts of a kind Providence; they love to to sour and loppered, in the same gradual ous gifts of a kind Providence; they love to hear the birds sing: they leve to look up into the heavens, broad and expansive; they love to bathe in sunlight, and feel the mild breezes of summer laden with sweet edors from woods and flowers. Young men often say they hate farming and all that is consequently with the pursuit. They would like

#### Preserving Manures.

The Boston Journal of Chemistry states gasses; and secondly, the loss of valuable salts by leaching. The first difficulty may be obviated by covering the excrement with eight or ten inches of good soil or loam, which will absorb all escaping gasses. A bushel or so of plaster may be advantageously scattered over the heap before the soil is thrown on. The whole masss should be perfectly covered, leaving no "chimney" for gaseous exudation. The danger of leaching may be avoided by covering the heap with hay or straw sufficiently thick to shed most of the rain. If kept in this way a sufficient becomposition, the products of which will be fields in the autumn to waste, by both of the above processes, some of their most valuable

## Brahmas as Non-Sitters.

of the Brahmas I attribute to the system of feeding which I have adopted: which is all in the direction of keeping the egg machine running and giving no opportunity for the fowls to get lazy and lay on fat. Indian corn which is the great staple in common use, I have almost entirely discarded as to heating, and rely principally upon stale wheaten bread which can be purchased very cheap, and able scraps, mixed with a little provender, and fed hot in the morning, with whole grain of some kind-wheat, buckday in summer or winter. In the summer cut grass very fine, and mix with the boiled potatoes, and in the winter add a little stimulant, like ginger or eayenne, occasionally. This system of feeding, with plenty of fresh water (warm in winter), has given me all the fresh eggs I have needed for a

#### [Fancier's Journal. Blue Grass in Illinois.

B. F. Johnson writes to the Country Gen-

tleman from Champaign Co. Ill. The magnificent color and growth of blue grass pastures is just now on every tongue. While the timothy and clover meadows and bare last summer and fall, are carrying but a light burden and short bite, blue grass pashalf a life time to get fully impressed with the fact that it is the grass paramount of the

## Sheep Raising in New England.

Rev. Wm. Clift, of Mystic Bridge, Conn. There is a large manufacturing and subject of investigation. But if the mercantile population to be fed, and the access to these markets by rail is more easy mile of railroad to every five square miles of fingers that are not penetrated by the railway. The price of meats is very every lamb or sheep a farmer can raise and fatten can be turned into money on short which taxes every dog and provides a fund for the payment of such losses as occur from

> Geo. E. Waring, says in Scribner's Magazine, that the farmers of Holland frequently cover their cows in summer with linea blan kets tied in place to guard them from the attacks of msects, and to shelter them from the frequent raw sea winds. It is usual, too, to set up in the pasture fields convenient scratching-poles against which the cattle may rub their sides and necks with evident ad-

## BREVITIES.

Owing to light rains in May, the hay erop of Connecticut, annually valued at about \$15,000,000, will be only about twothirds as large as that of last year; the yield in the valleys is about as large as usual, but falls off in the hill counties.

The corn and rich herdsgrass on the old

Hadley meadows, which three seasons ago were an almost unbroken sea of tobacco tell their own story. The revolution is so complete that scarce a dozen acres in this broad tract will be devoted to the weed. Over \$40,000 worth of thorough-bred colts were sold at A. J. Alexander's Woodburn farm near Lexington, Ky., Wednesday, one yearling going to M. H. Sanford, of New York, for \$4000, another to A. Com-

mack for \$3100, and several others to various buyers for \$1000 to \$1500. The hay crop in New Hampshire, especially in the valley of the Connecticut river, which usually amounts to 587,000 tons, worth \$7.000,000 or \$8,000,000 will be much smaller than usual, this year, owing to the

backwardness of the season. Mr. Wm. Horne, V. S., says in the Country Gentlemen, that in thirty years' practice caves, held down by evergreen branches; as a veterinary surgeon he never has found